

# SOUTHERN TEXTILE BULLETIN

VOL. III

CHARLOTTE, N. C., APRIL 25, 1912

NUMBER 8

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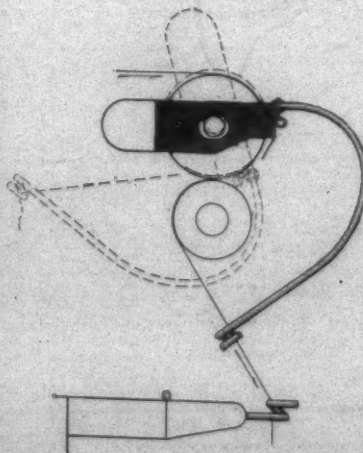
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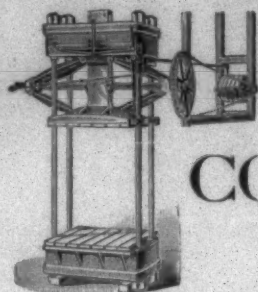
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# SOUTHERN TEXTILE BULLETIN

VOL. 3

CHARLOTTE, N. C., APRIL 25, 1912

NUMBER 8

## *Equipment and Testing for Uniform Sizing*

Leonard W. Cronkhite before National Association of Cotton Manufacturers

A large and carefully managed cotton mill investigated the supposed uniform work of its sizing department. On goods of the same specifications, the percentage of size added to the yarn was found to range from 6 to 11 per cent. In another mill where similar work running in two slasher rooms was tested for weight it was found that the one room was putting on 7 per cent, and the other 12 per cent of size. Two slasher machines side by side, using size from the same kettle and sizing the same sort of warps for identically the same weaves have been known to be from 3 to 5 per cent apart in respect of the amount of size added. Variations from hour to hour on the same slasher have been noted; and it is common mill experience that the first run in the morning is liable to give light warps, and the first run in the afternoon to give either light or extra heavy sized warps according to the custom followed during the noon stop.

Since relatively few mills calculate size records from hour to hour and day to day, perhaps few realize what lack of uniformity attends the sizing process. No manufacturer is safe in saying that his sizing is done uniformly until he has made careful tests, and attempted certain precautions that at best the average equipment may make almost of no use. In fact under the conditions imposed by the incompleteness of the average sizing equipment, uniformly good warps are well nigh a miracle. German mills, in particular, and some mills here, are proceeding on the assumption that the trouble lies largely in the equipment rather than in the vigilance of the size room operatives, and have modified the fittings and practice of their size departments accordingly.

The suggestions following are intended to enable checking up the work of a sizing department by certain standards absolutely essential to uniform work.

### **I. Equipment for Uniform Work**

In some mills the kettle room is like a clean kitchen, in others it is

a place where apparently anything will do in any way. Cooking size uniformly is so far from being a crude task that the equipment should be so good as to be an incentive to the operatives towards cleanliness and attention to details. Considering how easily the consistency of starch either in its manufacture or in its use is affected by slight chemical disturbances, the degree of cleanliness usually exercised in the kettle room is insufficient. Any size left in the kettle to harden and cause rust or corrosion is some day going to cause change in a mixing. Kettles and agitators need frequent scraping, flushing, and cleaning to insure uniform results in the first stage of the sizing process. If the kettle room is arranged properly, there will be little temptation to accumulate size sweepings, dirt, and hardened size, to dump into the boiling mixing to lower the quality of the size. Good starch bins are a small but paying investment. The best bins are those built overhead, at the bottom of which the starch is easily on tap. Metal pans or flooring at the base of the kettles take care of overflows and are easily cleaned.

### **Dissolving Becks.**

Some mills use tubs in which to stir the dry starch into water in order that it may be strained through a sieve on its way into the boiling kettle. The condition of some starches make this a wise precaution. The breakage on the slasher due to the presence of chips, insoluble lumps, and other foreign matter has in some cases been found to be considerable.

### **Cooking Appliances.**

The size kettle is worthy of more careful study. Some idea of the attention given it by foreign, especially German manufacturers, can be had from but a glance at the foreign literature on the subject. Made of non-corrosive metal. The occurrence of runs of rust spots and stains, due in part to improper cleaning, is generally to be laid to the character of the kettle or its fittings. The chemical action of

caked and putrifying size on a susceptible metal is rapid, thins the size, and causes staining. Iron kettles are a costly economy. Tinned or galvanized iron is better, but copper is better yet.

The use of wood for kettles is as a rule to be condemned. The shape of the wood vat is usually wrong, the corners of wooden vats making proper agitation impossible, and inviting the caking of size. Unless wood vats are frequently renewed the wood becomes impregnated with spoiled size that exerts an acid and thinning action on the mixings. Wooden vats are seldom constructed to close tight at the top and this adds further to make them undesirable.

A kettle ought to be fitted with tight covers. Often mill operatives are found boiling one kettle with the cover up and another kettle with the cover down. The difference in thinning of the mixings from condensation or evaporation is a factor. The rough and ready method of testing size in the kettle by letting some of the mixture run off the end of a stirring paddle does not show up variations in viscosity from such causes but they nevertheless affect the weaving quality of a warp. In a large industrial laundry where the slightest change in the consistency of the starch is at once reflected in the work, difference in the starch mixture was once traced to so slight a thing as the manipulation of the covers of the starch kettles. In one or two instances chemical disturbances from atmospheric conditions due to the proximity of nearby chemical work have made closed kettles absolutely necessary. Some foreign manufacturers have seen further reasons for tightly closed kettles, and utilize the construction to enable agitation of the mixture by strong steam jets instead of mechanical agitators, and to allow violent boiling of sizing substances not readily dissolvable in the usual way.

Any kettle ought to be fitted with agitators that agitate. The usual two-paddle one-way agitator is defective. It generally revolves the size instead of thoroughly mixing

it. Relatively few mills can stir the mixture into a perfect starch milk before they boil the size. The result is that the starch paste is not absolutely homogeneous and free from little globules of partly cooked starch that later appear at the squeeze rolls. Sets of agitator arms moving in opposite directions give a mixture of uniform consistency, break up the lumps, bring every part of the mixture into contact with the maximum heat, and lessen the accumulation of cakes of size on any part of the kettle or agitator arms. Apparatus of this kind moreover brings within the range of use many substances not easily dissolved but useful in sizing.

The method of heating the mixture in the kettle is important and intimately affects the uniformity of the results. Small jacketed kettles considerably used in foreign plants constitutes the only proper arrangement, certainly for small plants. The jacketed kettle does away with the disturbing factor of condensation. In some mills, getting dry steam seems to be a problem; thinning the mixture as much as 15 per cent. has been observed. Many size rooms are under a constant handicap in this respect. If steam is injected directly into the mixture every possible precaution ought to be taken to deliver dry steam. Where the location of the size rooms makes dry steam difficult to get jacketed kettles only ought to be used.

It goes without saying that every mill needs kettles enough to be able to boil up different mixings for different goods. Yet many mills for lack of an extra kettle or two are seriously limiting the proper special treatment of thousands of pounds of cotton in the relatively inexpensive sizing process preparatory to the expensive process of weaving. In some cases resort is had to either adding water to the size in the boxes or stirring in cold starch to get the right consistency for a special run of work on one of two or more slashers. It is impossible to do uniform work in this way. Even in a small mill where-

(Continued on next page)



### Equipment and Testing for Uniform Sizing.

Continued from Page 3

more than one kettle may seem unnecessary, resort to this rule of thumb method ought to be avoided by having an extra kettle.

#### Piping.

A similar limitation on special treatment of different warps often exists because of incomplete piping from the various kettles to the various slashes. Many mills have plenty of kettles, plenty of slashes, and various styles of work, but never have brought these elements into harmonious relation. It means only a small outlay on extra piping and valves, to connect every kettle with every slasher, so that any kind of mixing desired can be run on the special work of any slasher. The piping ought to be of copper or brass and of ample size. Any kind of iron piping means a run of spots at some time or other. There should be no sharp angles to hinder the flow of size and strain the pumps; all changes of direction should be in wide curves. The branch pipes leading from the main piping system to each slasher should be as large and short as possible, and readily detachable for special cleaning. If the main piping is dipped in a wide curve beside each size box, the length of these branch tap pipes can be reduced to a minimum to avoid all refuges outside the circulation for the size to cool and harden in.

#### Pumping and Circulation System.

It is practically impossible to size uniformly with a gravity system of conveyance from kettles to size boxes. In any gravity system the size has time to cool and gelatinize in some section of piping. If this cold size sticks and has to be blown out by steam, the result is a run of thinned size. Before the jelly lumps that blow out can be boiled up, they are likely to form hard spots on the yarn. A strong pumping system avoids some of these troubles.

No pumping system, however, is complete unless the piping admits of constant circulation of the size from the kettles through the pipes past each slasher tap, and back again to the kettles. This is absolutely essential to uniform work. The size is at all stages hot and is delivered at a uniform viscosity. If the long curve dip before mentioned is given to the main pipes besides each size box, all possibility of disturbance from cold size in the short branch tap pipes can be avoided.

A refinement found in a few mills is an arrangement of the piping by which all size left in the size boxes at noon and night can be pumped back to the kettles, leaving the boxes empty to be flushed and cleaned.

Many mills having no such arrangements leave size in the boxes overnight. It would be a saving in weaving expense to throw this size away rather than leave it. The skin that forms in contact with the air is almost impossible of solution again, the water used to flush and soften the rolls thins the mixture, the steam jets become clogged, and

the mixture itself cooked a second time is never quite right again. Some mills cannot even throw the size away without having the operatives carry it off to some sink by pail. The result is that boxes are seldom emptied and seldom cleaned. One large mill runs with an accumulation of one inch of plain black mud on the bottom of each size box for just such a reason as this. The least that can be done is to have direct sewer connection with each box. With a complete circulation and pumping system recourse to these wasteful and damaging practices can easily be avoided. Moreover the whole piping system, the boxes, and the kettles can be flushed with hot water and steam, and cleaning made part of the regular operation of the sizing plant.

In one or two cases where the proper system of return from each box is used, the sizes in the boxes at night is pumped back to a kettle in which there has previously been boiled up a mixing heavier than the usual batch. Mixing the return size that has been thinned in the boxes by condensation, with the thicker batch about evens up the thickness to the usual standard for the first run in the morning. This practice is an improvement, but even it is not strictly good, since the composite mixture described does not give the usual addition of weight. There being somewhat more solid matter than usual to each gallon to give the required thickness in the morning, the weight added to the yarn will be a little off standard. The perfect way is to gauge the size needed for each day and make fresh batches every morning. Size that is boiled up a second time is not as efficient as size that is applied direct from pairs the adhesiveness, a fact that pairs the adhesiveness, a fact that doubtless explains the feeling of some operatives that letting size stand over night makes it smoother in feel in the morning. Where size must be left overnight, mixing it with a freshly prepared and heavier mixing in the morning is the best expedient.

In mills having a long line of slashers and having no circulation system, difficulty is sometimes experienced on the distant slashers in getting the size as thick and strong as on the nearer slashers. In a gravity system this is due to the accumulation of separated water in the end pipes, and to the fact that the cooled size in the distant sections of piping has to be boiled up again in the boxes and is thereby impaired in adhesiveness, feeling on the yarn as if it were thin and weak.

One way to rectify this is to have a kettle of extra heavy size in the regular kettle room, conveying this if necessary in pails but preferably in an extra large pipe to a mixing beck near the further slash. Into this beck is run a definite proportion of the regular size and a definite proportion of the heavier size, the mixture being fed to the slashers at the right consistency. A good circulation system through large pipes will of itself obviate trouble

of this character in nearly all cases.

#### Size Box Attachments.

The ordinary size box is an added source of difficulty in getting uniform work.

The box of course should be of non-rusting material. Occasionally a case comes to light where the box and all the fittings are of brass or copper save perhaps one little elbow, and to the action of hardened size on that spot have been traced runs of rust spots.

The use of steam jets in the size box is a source of trouble. The steam thins the size. The steam pipes get clogged. The boiling is often too violent, and causes hard spots when the size strikes the yarn after it has passed the squeeze rolls. The extreme heat further cakes any size already cooled in the corners of the box. The size is not easily kept at a uniform heat.

The best remedy for these difficulties is the cornerless double bottomed box, the upper or size box of which is heated by hot water in the lower compartment. This scheme is in considerable use in foreign mills.

No more important factor for or against uniform sizing operates than the height of the size in the box relative to the squeeze rolls. Regulation of this is generally left to the vigilance of the slasher tender, but should be automatic. Some mills use electrical bell signals to call attention to the need for more size. A surer way is the automatic float feed. This keeps the size a constant level and at a practically constant heat. In mills where there are no such devices, as the size gets low in the box it is the custom of some operatives to keep lowering the depression roller instead of constantly running in more size. But it is not merely the depth of the depression roll in the size that determines the amount of size added to the yarn, but also the dip of the squeeze rolls into the size, since this determines the amount of size taken up by the lower rolls to the point where the upper and lower squeeze rolls meet the yarn, where they impregnate it with size as well as squeeze the surplus size off.

It seems evident enough that the weight and condition of the squeeze rolls can greatly influence the amount of size taken up by the yarn and to some extent the way in which the size will be distributed through the yarn. A large mill was once attempting to size similar yarns for the same work with similar mixings on similar machines, and yet use rolls weighing 400 pounds more on one machine than on the other without compensating leverage devices of any kind. The actual difference in amount of size added ran over 4 per cent. Too careful attention to the condition and lapping of the cloth on the rolls cannot be given, streaks and badly sized spots readily being caused by poor rolls.

On one or two new foreign types of slasher machine, careful attention to all such details at the size box, and also to breaks and laps on the back beams is made easy for the operatives by arrangement of the machinery in such a way that

the weaver's beam of sized yarn is located near the size box just ahead of the back beams, the whole operation being under the operative's eye from one point.

#### Slasher Machine Factors.

The usual cylinder drying slasher has defects that have led to the adoption in Germany, France, and to some extent in England, of improved forms of air drying apparatus, utilizing modern principles of forced ventilation. As these improvements do not in all points affect the question of uniform work, they ought not to be described at length here; but a serious study of their claims to betterment of the work is worthy any manufacturer's time and impartial literature on the subject can be readily obtained. Briefly the new system, in addition to giving greater production, dry the yarn progressively, reduce the tension to a minimum, retain the original roundness of the thread largely do away with baking the ends together and the consequent injury to the warp in separating the ends, automatically cool the drying chambers during stoppages or slow speed to avoid hard-sized runs, and better the room conditions. In addition some of the new machines are fitted with either rotary or reciprocating brushes to better lay the fibre before the yarn is dried, and to cause easier separation after it is dried with less tearing up of the fibre at the lease rods.

The substitution of air for cylinder drying involves an important factor affecting uniform work that is extremely difficult to regulate on cylinder dryers. Stoppages or slow runs generally mean hard and streaky sized places entailing extra damage to the threads when they are pulled apart at the lease rods, extra difficulty in the loom, and an uneven feel to the goods. The use of automatic appliances to reduce the steam heat in the cylinders is a help, but even then the heat retained by the metal surfaces of the cylinder tends to bake the yarn, cause hard runs and extra damage at the lease rods when the sheet is separated. In the new drying machines quick cooling of the drying chambers during stoppages is easily effected.

When a slasher is used for sizing and drying a number of different styles in turn, care is not always taken to regulate the heat, so that a light sheet will be delivered on the weaver's beam with as much of the necessary moisture in the starch and the cotton as would be retained in a heavy sheet. A reduction of say 20 per cent in steam pressure will not mean a reduction in degrees of temperature in anywhere near as great a proportion and allowance for greater reduction in steam pressure made.

An apparently minor cause can greatly vary the quality especially of close weaves, and that is the rolling and crossing of ends as they wind on the weaver's beam. A simple patent device worthy of notice consists of a straight comb and another offset comb, the teeth of which are inclined; the bent comb forces the ends in each dent of the

(Continued on Page 6)



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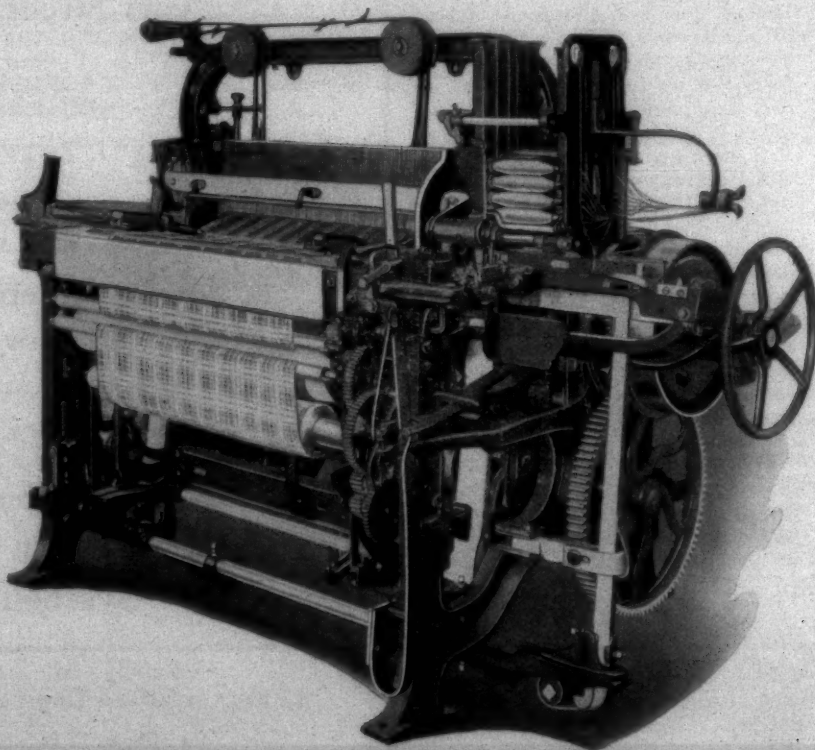
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**Uniform Sizing.**

(Continued from Page 4)

straight comb to reach the front roll side by side in the order originally intended.

**II. Tests of the Uniformity and Quality of the Work**

In any mill frequent tests of the uniformity and quality of the work done by the sizing department ought to be made.

Wherever it is practicable there ought to be an established table of standard percentages of size needed on each kind of warp for the various weaves. The weights of at least several beams in each style ought to be taken each day, and the resultant percentages of size calculated. In such calculations, naturally only the actual average count, and not the nominal count, of the yarn ought to be used. Records of this kind once figured and established as part of the routine, cost almost nothing, are little work, and show up trouble at its source.

Where the same sizing materials are used day after day in fixed formulas, a very fair laboratory test for uniformity of materials can be made in the mill right at the machines by means of an ordinary Twaddell hydrometer, used in conjunction with a thermometer to get readings at a given temperature. The habit of going by certain standard readings for each formula will check up variations and is easy for any operative. Going a step further, purchasing departments ought so far as feasible to buy all sizing materials on specification, paying for quality. Several corporations are doing this on starch and tallow, in the case of starch specifying a maximum limit for the moisture content, a limit for the impurities, a condition as to alkalinity or acidity and where the degree of progress of the starch manufacturer admits, a fixed viscosity, with understood penalties and procedure for deviations from standard. Any good textile laboratory can check up these points on shipments. Every firm with a really good product welcomes this kind of test and purchase.

New products should be tried only after a chemical test showing them to be at least harmless and indicating some probability of their usefulness. In the case of new sizing products every chemist, knowing as he does, the limits to laboratory work on products new to him, and presumably turned out by specializing chemists, is willing to hear the seller's interpretation of the chemical analysis he reports to a mill, before having a mill man pass final judgment on the article. Some mill men think they are conservative in sizing matters, when they really are only timid in the dark. Many a mill man has been induced to try new products, has trusted to the supposed infallibility of a practical tests in the mill where a sizing test is infallible only if it is the very painstaking detailed test that it seldom is, and lands months later with several thousands of dollars loss that a laboratory test could have avoided. A chemical test often shows too that the cheapest place

to buy water is at the mill faucet, and the cost of the information is less by the sheet than by the barrel. An analysis of a list of tallow, tallow substitutes and adhesive sizes to add to starch shows eye-opening results. Some are all right, but some are built on recognizing that almost anything harmless can pass the sort of test made in some mills.

A real comparative test of the value of two sizing materials, if the type of equipment used is imperfect, should start with careful allowance for all the possible unequal factors that incompleteness of the equipment can cause in sizing two sets of warps for comparison. The raw starches and other ingredients should be weighed, not measured, since their physical forms may differ enough to make given measures unequal in weight. A record of the two sets of formulas employed and of percentages of size added should be kept, and the size weights compared with the cloth weights after filling weights are deducted. While great weight added and retained may not be desired, the figures will show just how much size is giving the two weaving results, and how much is retained despite the chafing in the loom. If possible specially weighed lots of filling off the same doff ought to be used in weaving the warps to be compared.

The weave test is the test, but it is often here that the least care is taken in getting at the actual facts. The general appearance of the looms will show something, but only in extreme cases. The operative may be asked whether the loom or looms is running all right, or the size room may simply wait for "back firing." If no back fire comes the warps were "fine," if it comes they were poor. Between the extremes however, there are degrees of goodness in weaving that few, if any operatives can gauge. Detailed tests run on two sets of looms under ideal conditions showed differences in production up to 4 per cent that were invisible to the operatives. Often a great percentage might pass notice. The safe way is to pick certain looms and have an exact record of breakages made over a definite period. This record in conjunction with an exact record of cloth taken off the looms between definite periods measured for each loom will show comparisons that can be relied on. If tests are worth running at all, they are worth this degree of care.

With proper equipment, known materials and tests that test the sizing process can be put on as exact and dependable a basis as any other process in cotton manufacture.

**He Did.**

The hour was late and the young men at the dance had removed their gloves.

One girl present, fearing for her dainty gown as she glanced at the moist hands of her perspiring partner, said shyly: "Pardon me, would you mind using your handkerchief?"

The young man hastily blew out his handkerchief and blew his nose. —Exchange.

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While extremely sensitive to variations in the atmosphere, and very delicate in its control, still, at the same time, it is **ABSOLUTELY POSITIVE** in operation and entirely reliable under any and all conditions. In brief, IT IS A PRACTICAL, DEPENDABLE INSTRUMENT, adapted to general requirements and **ABSOLUTELY ACCURATE** in its **CONTROL OF THE HYGROMETRIC CONDITION OF THE ATMOSPHERE**.

It "FEELS" or "SENSES" the temperature and moisture of the air and automatically **controls and regulates the degree of humidity**.

The mechanism is operated by compressed air, at about ten pounds pressure. It can be set to give any desired amount of humidity; and, when once adjusted, operates automatically without further attention.

Its operation is so accurate and precise that the humidity of a room can be maintained at the same degree without being the least affected by climatic changes. Record cards made in recent tests show less than 1½ per cent. variation above or below point for which instrument is adjusted, during extended periods.

The new Automatic Controller can be applied to humidifying systems already installed.

Correspondence solicited. Write for Booklet A-1.

### American Moistening Company

BOSTON, MASSACHUSETTS, U. S. A.

WILLIAM FIRTH, President.

FRANK B. COMINS, Vice-Pres. & Treas.



# Standards of Cotton Yarn

A. T. Bradlee before National Association of Cotton Manufacturers

A few years ago this Association appointed a committee to look into the question of a standard sale note. A large amount of work has been done by that committee in regard to cloth and a standard sale note for cloth has been adopted and endorsed by this Association but I think I am correct in stating that it has not come into general use. This may be partly attributed to the conditions of trade prevailing in the last few years and the desire to put no possible obstacle in the way of making a sale, for, as one manufacturer stated to the writer, "any sale today looks good to me, I don't care what form it is written on." Undoubtedly trade conditions have hindered the adoption of the cloth sale note but, in my opinion, far ahead of any such reasons are other fundamental obstacles which have prevailed and which will continue to prevail until we have more general enlightenment on the subject with which we are dealing.

We cannot have a standard sale note until we have a standard which to make the sale note. That standard must not be the standard of the seller nor the standard of the buyer, nor can it be a standard of compromise. It must be a standard of fact and, gentlemen, we do not today know the facts. One or two individuals of this Association have made some investigations in the past and are now making certain other investigations along this line. They are blazing the way but this work of ascertaining the fact should not be left to an individual or individuals, who, as a rule, can only give it spasmodic attention. It should be taken up by some public body of recognized strength and national reputation;—a body which by its very standing in the community would be the natural authority for such facts. In good times or bad times a buyer or a seller may well hesitate to sign a sale note containing a lot of conditions about which he is ignorant and about which he has no easy way of ascertaining the truth.

The time is ripe for some organization connected with the textile trade to take up this work and es-

tablish for this country proper standards for the testing of cotton yarn and fabric along similar lines to those by which they have been established in foreign countries. With the new demands of trade and the increasing competition of our times this standardization has got to come and on this work The National Association of Cotton Manufacturers, the oldest and the strongest organization of the cotton trade, should not allow any other organization to get ahead of it. The United States Government at Washington, in their Department of Commerce and Labor, are carrying on splendid tests at the present time on just these lines with the idea of drawing up specifications for Government purchases and the testing of those purchases when received, to see that they are up to those specifications. They have adequate laboratories fitted up for this special work and they are endeavoring to do the work on strictly scientific lines. They realize, however, that they are not manufacturers, and they have shown every desire and wish to co-operate with us. I have talked with the Government officials who have the work in charge; I have seen the laboratories and on behalf of your committee I am doing what I can to co-operate with them but as a representative of The National Association I am ashamed when they ask me for our standards and our reasons for adopting them for, what are our standards, what real facts have we got to give them and on what authority are those facts based?

The Yarn Sub-Committee, of which I am a member, has hesitated in their work, partly awaiting the developments of the situation with the cloth contract but especially because our early meetings showed wide divergence of opinion as to the fundamental facts necessary for even a start on the standardization of a contract. On the proper or allowable variation in count, twist and breaking strength of the proper humidity conditions under which yarn should be tested, you can ask a dozen manufacturers with as many replies and hardly any reply will be based on any real correct investigation of the facts. A professor of

one of the textile schools has stated as I understand it, that the extreme variation from count should be, one number either way but one number on a No. 10 yarn is 10 per cent while one number on a No. 100s yarn is only one per cent. Such reports, in my opinion, are not based on fact and yet if such people as this express such views what can we expect from the ordinary buyer, who uses textile products but is not at all familiar with their manufacture. Still less can we expect intelligent verdicts from ordinary juries on textile cases under trial in the courts.

We publish tables of standard breaking strength and we talk of breaking strength and size as if they were practically constant in the same bobbin or the same skein ignoring absolutely the hygroscopic condition of the yarn at the time of testing. This is all wrong. Comparative tests for breaking strength and, to a less extent, tests for size are of no value whatever unless we know that the hygroscopic condition of the yarn at the time of testing is the same in each instance. A few weeks ago a large manufacturer wrote to my firm that from all spinners he was finding a great deterioration in the strength of the yarns he was then receiving over those of last summer, and that spinners had attributed it to the greater strength of last season's cotton.

Now, this explanation was perhaps partially true, but the real reason for the difference was due to the fact that the yarn tested was in an absolutely different condition as regards humidity and it was the difference in such condition that caused the apparent great deterioration in strength. In the summer his tests were made in a room where, by open windows and natural causes, the atmosphere and the yarn itself contained approximately the natural moisture of the outside air,—while recent tests were made in an atmosphere taken into the building at around zero degrees of temperature and artificially heated to about 70 degrees, with its natural moisture evaporated and the yarn exposed to this atmosphere was equally dry. It was not in its

natural condition and did not show its natural break. When put into the same condition the correct strength was re-established and the trouble was gone. The manufacturer was astonished; it was an entirely new thought to him.

When I state to you that the half dozen skeins of yarn that had been in an office building for a few days broke at an average of 83 pounds and the same skeins after being exposed for a night to a damp outside atmosphere, protected from rain, broke on the same machine and by the same operator at an average of 93 pounds, and a cone of yarn under a regain condition of 6 1-2 per cent broke at 87 1-2 pounds, while the same cone when transferred into an 8 1-2 per cent regain condition increased in break to 103.3 pounds, a difference of 18.19 per cent, you will see the futility of comparative tests when conditions are disregarded.

There is no doubt but what thousands of pounds of yarn and cloth have been rejected and returned by honest buyers through such misleading tests and for a buyer to buy or a seller to sell yarn on a guaranteed breaking strength is worse than folly, unless they know the conditions under which those tests are to be made. Yet this is common practice. When the United States Government write me that the same reeling shows a difference in size of the yarn of over 5 per cent between tests made under 45 per cent and those made under 85 per cent humidity, you will see also the necessity of knowing the hygroscopic condition of the yarn in times of dispute as to its sizing.

There is a woeful lack of knowledge on this subject among spinners as well as users of yarn in this country and it is time that the trade were enlightened. Foreign countries have for years been educating along these lines, both the manufacturers of textile products and the users of textile products, with the result of much elimination of controversy between buyer and seller, and when such controversies

(Continued on Next Page)

## W. H. BIGELOW

AGENTS FOR

### ASHWORTH BROTHERS

Tempered and Side Ground Card Clothing

Tops Reclothed. Lickerins Rewound. Cotton Mill Machinery Repaired.

12 to 18 West 4th St., Charlotte, N. C.

127 Central Avenue, Atlanta, Ga



## DISCUSSIONS BY PRACTICAL MEN

### Answer to Enquirer.

Editor:

I notice that "Enquirer" wants to know what size ring, traverse and gauge to use for 10's hosiery yarn.

I would use a 2-inch ring, 3 3/4-inch gauge and a 7-inch traverse. This may be radical but will run and show results.

R. S.

### Questions For Carders.

I have a number of cards on which the flats for about one inch on each end, stay clogged up with dirty looking waste. The rest of the flat strips are clean and look all right. Will some one give the cause and remedy for the trouble? When I took this room oil had been allowed to leak on about 9 of the cards. I stopped the leaking, but would like to know how to counteract the effect of the oil.

I will appreciate an answer to the above questions.

Remedy Hunter.

### 100 Per Cent Efficient.

Franklin H. Wentworth, Secretary of the National Fire Protection Association, stated at the meeting of the New England Foundrymen's Association, April 10th, that out of more than 11,000 fires under automatic sprinklers, of which the association had records during the past fifteen years, there was not a single instance where the automatic sprinkler, when of standard, approved make and installation, had failed to put out or hold in check a fire under it, except in cases where the system had been tampered with, or crippled by an explosion.

### New Idea in Humidifying.

The Aragon and Arcade Mills of Rock Hill, S. C., are trying a new plan of humidifying by which they hope to obtain a condition of humidity more nearly like natural conditions existing in England.

The plan on trial is the installation of humidifiers on the outside of the mill walls opposite windows. Thus, practically all air coming in through these windows is already laden with the proper moisture and is cool and fresh.

The outcome of this plan on trial is being watched at these mills with a great deal of interest. Mill men in general will be interested in the idea, as it may prove a decided advancement over systems of humidification now in use in this country.

These mills are under the management of J. A. Long, who is president respectively of both mills.

### Invents Roving Clamp.

Fletcher C. Graddick, of Albemarle, N. C., has received letters of patent from the office at Washington for a machine which is destined to work a great saving to the cotton

spinners of the country. The invention is known as a roving clamp and has reference to improvements in or relating to spinning or twisting frames wherein provision is made for effecting a second breakage at the receiving side of the drawing rolls of a roving or thread which has previously broken at the delivery side of the rolls. In working the machinery now in use in all spinning mills of the country a thread breaks and machine continues to feed, accumulating the roving until the operative happens to discover the breakage and remedies the trouble. This machinery automatically cuts the thread in case of breakage and stops all accumulation of waste, thus saving the cotton and extra labor in removing waste from the machine. It seems to be a very valuable invention, and although the patent has only just been issued Mr. Graddick has been the recipient of a number of flattering commendations from mill men.

### Answer to Young Carder.

Editor.

I notice the question of "Young Carder" as to the reason for cones on roving frames being concave and convex and will say that it is a question that has puzzled many young men.

First I will say that the object of the cones is to regulate the winding of the roving on the bobbins.

We must wind on the bobbins the same length of roving as is delivered by the front roll and must do so at a uniform speed to prevent the ends becoming slack.

As the diameter of the bobbins increase at each change of traverse the speed of the bobbin must be decreased in a constant ratio.

It can be proved by mathematics that a straight tape would not reduce the speed of the lower cone in the proper differentiation to the traverse of the cone belt and that it requires conical surfaces to produce the desired results.

It is a matter of calculation which can be derived from the length of axis, greatest diameter of driving cone.

It requires what is known as a parabolic curve to produce the right ratio of bobbin speed as the belt is moved equal distances along the axis of the cone.

The cones must be so constructed that in shifting the belt toward the small end of the top cone, the number of revolutions of the driven cone must decrease in the same proportion as the distance the belt has been moved. The two cones must be equidistant at all points, or, exactly parallel and the sum of their diameters must be equal at any position of the belt.

I could explain to "Young Carder" with a drawing exactly how the shape of the cone is laid out, but it would require more mathematics

than most carders understand.

Student.

### Standards of Cotton Yarn.

(Continued on Page 8.)

do arise they offer the means of their practical and peaceful solution through established authorities:

1st. The conditioning house where tests can be conducted under uniform conditions known alike to the buyer and seller.

2nd. By tribunals of arbitration founded on the work of those conditioning houses.

In England they have a sale note for cotton yarn.

All that it says about count, strength, twist, etc., is as follows:

"In case of dispute as to counts, length, weight, or condition, the yarn shall be tested by and according to the rules of the Manchester Testing House, and its certificates shall be binding on both parties, who however, shall have the right to be represented when the samples to be tested are drawn.

"Either buyer or seller has the right to ask the Manchester Testing House to repeat the test, and in that case the average result of the tests shall be taken as final and binding on both parties."

The Manchester Testing House, as you see, is the recognized authority. Their tests are made under certain published, standard conditions. What are the standard conditions in this country for making tests? Who is the recognized authority? The so-called systematizing of business of today is developing the idea of specifications for buying. Such specifications are usually drawn up by the system expert, by chemists, or others, who know nothing about the principle of textile manufacture and who naturally turn out specifications that are impossible of fulfillment or unjust to the spinner. In fact, the most of these specifications call for the yarn or cloth to stand the test on buyer's apparatus as he may decide to test it, without any information as to what apparatus or under what conditions the tests are made.

It is a wonder that we have disputes and differences between the tests of the manufacturer and those of the buyer. They must always exist until some uniform system under uniform conditions is adopted by the trade. The way to do this is to establish a national conditioning house and laboratory for this country similar to the Manchester Testing House. I believe it should be established by and be under the control of this Association as a recognized authority, first, to establish the uniform conditions to be adopted and then to spread its information before the entire trade with its reasons for adopting the standards, as does the Manchester Testing House.

On account of my personal connection with the Massachusetts In-

stitute of Technology I have been able to arrange during the past two years for certain experiments and theses on this subject by graduating students, but these have necessarily been very incomplete because of the small amount of time that can be given to them and because of the lack of the exact kind of a laboratory necessary for the work. I do not speak with authority, but I believe the Institute would welcome the fitting up by this Association of such a laboratory in their new buildings about to be erected, and that they would then, if desired, furnish for a nominal sum trained experts to make such tests from time to time as would be necessary.

I am aware that there are many who do not believe in such innovations. The methods of the past have been good enough for our fathers, they should be good enough for us, but, gentlemen, scientific methods in all forms of business are pushing to the front with rapid strides. The Institute of Technology of which I have spoken, a strictly scientific school, is only fifty years old but today it is recognized as one of the greatest schools in the world. It is in step with the times and in the more severe competition that awaits us, we, of the cotton manufacturing trade, must get in step also. We cannot know too much about our business and for the honest manufacturer it is well that the buyer of his goods should be equally posted. I believe that there was never greater honesty in business as a whole than there is today, and that most of the differences of the textile business arise through ignorance of the real conditions and the real troubles in dispute. I am sure that the establishment of a national laboratory and conditioning house would help smooth the paths of all of us. It must come some time. Is it not time now and is not this the Association to establish it and to make it the authority of the trade?

Until that is done by this Association or someone else we can expect little from a standard contract other than in mere details of tare, selling terms, etc., about which we have now few disputes. On the important matters we can each form our own individual standard but neither you nor I nor any committee of us can form standards for others to abide by until we have recognized public facilities for establishing what those standards shall be and open up for easy access to the buyer and the seller alike the same facilities for their own conviction as to the justice of the standards so adopted.

\*At that Testing House tests are carried out not only for firms and individuals in Manchester, but in all parts of Great Britain, as well as in France, Germany, Holland, Turkey, India and other countries.



# SOUTHERN TEXTILE BULLETIN

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THURSDAY, APRIL 25

### The Textile Exhibit.

The Textile Exhibitors Association are this week holding an exhibit of textile machinery, mill supplies and general textiles in Mechanics Hall, Boston, Mass.

The exhibit will be open the entire week and is the largest thing of its kind ever held in this country and of considerable more magnitude than a similar exhibit which was held two years ago.

The exhibits are arranged in booths and each exhibitor while limited by space to a few machines has endeavored to present those which show the highest development in its line. The progress of the past two years in the development and improvement of textile machinery will be very clearly shown by this exhibit as not only are new models of old machines shown but many are present which were unknown two years ago.

The cotton manufacturers who were able to attend this convention are indeed fortunate as such a collection of machinery has been rarely gathered together.

### The Speed Mania.

Somehow the things that "can not happen" do happen. The building which is fire proof burns down, the bridge which can not fall is swept away by the mighty flood and the ship which can not sink lies beneath the waters of the ocean.

The Titanic, which went down last week, was heralded as the perfection of ship building. She was larger than any of the other great ships, being 802 feet in length, or as long as three city blocks and her twelve decks towered above the ocean to the height of a modern skyscraper.

The equipment was luxurious in the extreme and so powerful were her engines that, when she left Southampton, the mere suction of her propellers caused two great ships to break giant hawsers and be drawn away from the docks to which they were fastened.

The first day this express train a \$10,000,000 cargo and grouped of the deep made 480 miles and the second day covered 516. The third day 564 miles were passed and, although warned by wireless of the danger of iceburgs, two more boilers

were started and she was driven hell bent through the darkness for a record was to be broken and to break a record was a feat meant to win the patronage and the gold of a speed crazed world. The officers and the passengers swelled with pride as they trod the deck of the greatest ship afloat and boasted of the inability of the rain, the wind and the ice to do her injury, for was she not unsinkable and invulnerable?

And even as they boasted a giant hand rose from out the sea, and running an icy finger along her pasteboard sides, sent her a crumpled mass, down to the quiet forests of the ocean where two miles beyond the sight of man she will lie for eternity an object of curiosity to the monsters and low animal life which are said to inhabit those regions.

While the curtain slowly descended upon this scene of death, a drama was enacted which tried the souls of men and showed the metal of which they are made. A few cowards were there and they are trying now to explain to the world how they escaped but the heroism of the men on the Titanic will ring down through the ages.

"Women and children first—and then hell" is the law of the sea and never was it better observed than on that memorable night.

It is a creed based upon the formula that the mothers of the race must first be saved and after that the strongest men are the fittest to survive.

The Titanic was so luxuriously equipped that the price of one suite of rooms was \$1,480 for one voyage and yet over half the life boats davits had never been equipped with boats and the price of that neglect is 1,600 human lives.

The picture of those doomed men when the last life boat had left has been given to the world with all the terrible details.

They tell us that even to the last minute the strains of "Nearer, My God, to Thee," played by the heroic band of the ship, were wafted across the waters of that icy sea.

Then with its stern raised two hundred feet in the air like a giant finger of scorn pointing at the folly of the age, the great Titanic started head first on its last journey and now lies a flattened mass along the bottom of the ocean.

A \$10,000,000 ship lies there, with around it like sentinels with glassy eyes staring upward through unfathomable depths are sixteen hundred men and women to whom life was sweet.

This is the price that has been paid for speed and while we shudder and turn aside to shed a tear to-day, tomorrow we will be building the new Titanic, but it will be larger and faster.

And when she plows through the ocean it will be "full speed ahead" for records must be broken even if icebergs are somewhere near.

We are living in an age of speed mania, and the fastest automobile, the fastest train and the fastest ship are the ones which get the gold which is paid for passage. The great lesson to be learned from the loss of the Titanic is that things "can happen" and emergencies should be prepared for however unlikely they may seem.

## Board of Equilization Meets.

Comptroller General Jones has issued a call for the South Carolina State board of equilization to meet in Columbia, S. C., on May 2, when the textile industries of the State, including the cotton mills, cotton oil mills, and fertilizer factories will be assessed for taxation. The assessment is on a basis of 50 per cent of the actual value as fixed by the board.

The report of last year showed that there were 170 textile plants in the State with a capital stock at par, valued at \$60,084, 850. The market value was \$53,056,428. The actual value as fixed by the board was \$55,625,608. The board placed the assessment at 50 per cent or \$27,812,804.

## Secretary Hester's Report on Weight of Cotton Bales.

New Orleans.—Secretary Hester has issued a statement of weights of 11,695,047 bales of cotton handled at ports and across the Mississippi, Ohio and Potomac rivers overland to American manufacturers out of the cotton belt during the months of September to March, inclusive, showing an average per bale of 518.77 pounds against 516.84 for the same period of last year.

The State averages are: Texas ports 528.02 against 527.90 last year; Louisiana ports 526.26 against 522.02 last year; Alabama ports 528.54 against 524.74 last year; Georgia ports 510.62 against 500.22 last year; South Carolina ports 497 against 485 last year; North Carolina ports 490 against 490 last year; Virginia ports 490 against 490 last year; Tennessee, etc., 529.19 against 527.25 last year.

These averages are, as stated, of cotton handled at ports and overland based on official returns of the secretaries and superintendents of the exchanges and exports at ports, etc., in the States named.



## PERSONAL NEWS

J. W. Moore of Inman, S. C., has moved to Columbia, S. C.

R. N. Cobb has moved from Williamston, S. C., to Greer, S. C.

Z. V. Gray is now overseer of spinning at the Springstein Mill, Chester, S. C.

J. W. Rabor has accepted position as section hand in the Brown Mill, Concord, N. C.

W. A. Foil, of Concord, N. C., has completed his contract for doing the excavating work at Whitmire, S. C.

B. K. McCuen has accepted position as overseer of carding and spinning at the Fairmont (S. C.) Mfg. Co.

J. B. Johnson has resigned his position in the office of the Fairmont (S. C.) Mfg. Co.

W. J. Autin has accepted position as overseer of carding at the Green River Mfg. Co., Tuxedo, N. C.

N. C. Martin is now overseer of cloth room at the Laurens (S. C.) Cotton Mill.

R. L. Howe is now overseer of carding at the Arcade Mills, Rock Hill, S. C.

J. E. Finlayson is now overseer of carding at the Martinsville (Va.) Mills.

R. B. Hunt is now overseer of spinning, spooling and twisting at the LaGrange (Ga.) Cotton Mills.

J. A. Adams is now overseer of carding at the Merrimac Mills, Huntsville, Ala.

F. E. Blair is now overseer of spinning, spooling and twisting at the Columbus (Ga.) Mfg. Co.

H. J. Christly is now in charge of the shipping and finishing rooms at the Twine Mill, Roanoke, Va.

J. E. Thompson has accepted position as overseer of cloth room at Pacolet Mfg. Co. No. 4, New Holland, Ga.

D. P. Pritchett is now overseer of weaving at the Elizabeth Mills, Egan, Ga.

L. A. Williams is now overhauling carding and spinning at the Globe Mill, Augusta, Ga.

J. D. Bacon has resigned his position as superintendent of the Hope-dale Mill, Burlington, N. C.

H. Campbell is now second hand in carding at the Monaghan Mill, Greenville, S. C.

C. R. Daly has resigned as second hand in spinning at the Wiscasset Mill No. 2, Albemarle, N. C.

W. L. Gaston has resigned his position as overseer of weaving at the Apalache Mill, Arlington, S. C.

D. R. Hinkle, who for some time has been located at Winston-Salem, N. C., has moved to Atlanta, Ga.

W. L. Mullis is now second hand in spinning at the Hoskins Mill, Charlotte, N. C.

John May has resigned his position as loom fixer at the Springstein Mill, Chester, S. C.

J. H. Moore, of Concord, N. C., has accepted position as overseer of slashing at the Highland Park Mill No. 3, Charlotte, N. C.

O. A. Newsome has resigned his position as overseer of weaving at Union Cotton Mills, Lafayette, Ga.

E. T. Ponder has resigned his position at Cherryville, N. C., and is now located at Dania, Fla.

W. T. Glenn is now chief engineer and master mechanic at Goldville, S. C.

J. T. Wilson has resigned as manager of the Gaffney (S. C.) Mfg. Co.'s store and has gone into business at Wellford, S. C.

S. G. Howard has been promoted from section hand to second hand of spinning at the Wiscasset Mill No. 2, Albemarle, N. C.

CARDS,  
DRAWING,

COTTON  
MILL MACHINERY

SPINNING  
FRAMES,

MASON MACHINE WORKS

TAUNTON, MASS.

EDWIN HOWARD, Southern Agent  
Charlotte, N. C.

COMBERS,  
LAP MACHINES

MULES,  
LOOMS.

W. H. Dupre, from the Buck Creek Mills, Siluria, Ala., is now machinist at the Central Mills, Sylacauga, Ala.

J. P. Cooper, former receiver of the Trion (Ga.) Mfg. Co., is in New York in the interest of that company.

J. W. Willis has been promoted from section hand to overseer of weaving at the Bamberg (S. C.) Cotton Mill.

J. W. Caston, from Arcade Mills, Rock Hill, S. C., is now fixing looms at Highland Park Mill No. 2, of the same place.

A. E. Helton, from the Teemorelee Mills, Monroe, N. C., is now overseer of spinning at the Rhodes Mfg. Co., Lincolnton, N. C.

H. W. Vanpatten, of Aragon, Ga., has accepted position as overseer of weaving at the Echota Mills, Calhoun, Ga.

James Gates, overseer of carding at Mill No. 2, of the Fort Mill (S. C.) Mfg. Co., has been transferred to a similar position at Mill No. 1.

L. H. Quinn has resigned his position as overseer of carding at the Vivian and Howell Mfg. Co., Cherryville, N. C.

H. L. Sedberry has resigned his position as section hand in spinning at the Erwin Mills, Cooleemee, N. C., and accepted position as overseer of spinning at the Brander Mill, Concord, N. C.

George E. Barlow, formerly with the Piedmont (Ala.) office of the Coosa River Spinning Co., has been elected secretary and treasurer of the Atlantic and Gulf Mills, Quitman, Ga.

T. H. Rothrock, a preacher of Gold Hill, N. C., has accepted position in the knitting department of the Wiscasset Mill, Albemarle, N. C.

G. R. Johnson has resigned as second hand at the Whitman Mills, New Bedford, Mass., and accepted position as overseer of carding at the Alta Vista (Va.) Cotton Mills.

Forest Mayer, formerly second hand in the weave room at Granby Mills, Columbia, S. C., is now overseer of weaving at the Fairfield Mills, Winnsboro, S. C.

A. W. Pitts, who recently resigned as overseer of carding at the Buck Creek Mills, Siluria, Ala., has accepted similar position at the Bonham (Texas) Cotton Mills.

W. B. Warren, from the Chadwick-Hoskins Mill No. 3, Charlotte, N. C., has accepted position as overseer of spinning at the Jewell Mill, Thomasville, N. C.

W. N. Darby has resigned as overseer of carding at the Walton Mills, Monroe, Ga., and accepted similar position at the Panola Mill, Greenwood, S. C.

B. F. Gladden has resigned as second hand in carding at the Avon Mill, Gastonia, and accepted position as overseer of weaving at the Dorothy Mfg. Co., Dallas, N. C.

J. M. Davis, superintendent of the Newberry (S. C.) Cotton Mills, is in Boston this week visiting the textile machinery exhibit at the meeting of the Textile Exhibitors Association.

H. A. Coker has resigned his position as overseer of carding at the Walton Mills, Monroe, Ga., to accept similar position with the Millstead (Ga.) Mills.

OVERFLOW PERSONALS PAGE 16



CAPACITY 1000 POUNDS LINT PER HOUR.

## The C. O. B. Machine

Cleans, Opens, Blooms all Grades of Cotton

NO BEATERS—nothing to injure the cotton—The simplest opening and cleaning machine on the market. Do away with your mixing bins.

Cotton cleaned by the Air Process—Opened and Bloomed ready for the Pickers.

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EMPIRE DUPLEX GIN COMPANY, 68 Willam St., New York

Southern Representative

Send for Catalog. Write us, we will answer.

ATLANTA EQUIPMENT CO., Atlanta, Ga.



## MILL NEWS ITEMS OF INTEREST

**Columbus, Ga.**—At a meeting of the local cotton manufacturers held here May 4 was officially announced as factory picnic day in Columbus.

**Brookford, N. C.**—The Brookford Mills have installed the Kinkead apparatus for the alignment of the shafting.

**Fairmont, S. C.**—The Fairmont Manufacturing Co. is installing an additional 140 new dobby heads, thereby changing the remainder of the plain looms to fancy work.

**Cooleemee, N. C.**—The Erwin Cotton Mills were closed down a couple of days last week in order that a portion of the dam over the river might be raised.

**Columbia, S. C.**—The stockholders of the Capital City, Granby and Richland Cotton Mills, all of this city, have been notified of a special meeting to be held here on May 22nd.

**Cherryville, N. C.**—J. S. P. Carpenter and D. A. Rudisill are installing an ice manufacturing plant at the Melville Mill, the cost of the plant to be about \$2,100.

**Wyoming, R. I.**—The Wyoming Yarn Co., manufacturers of woolen yarn, have received an order from the Ashaway Woolen Co., Ashaway, which will enable them to start operations at once.

**Concord, N. C.**—One of the houses at the Young-Hartsell Mill, occupied by G. E. Starnes was totally destroyed by fire last week. The house was the property of the mill company and was fully insured.

**Louisville, Ky.**—Articles of incorporation have been filed by the Marvel Underwear Co. The incorporators of the new concern, which is capitalized at \$10,000, are E. O. Bol and Martin A. Seward.

**Grafton, W. Va.**—The capital stock of the Webster Woolen Mills, of this place, is to be increased. This company now operates an equipment of 11 broad looms, dyeing and finishing equipment driven by steam power.

**Cornelius, N. C.**—It is reported that a cotton manufacturing plant is to be established at this place. Details have not as yet been announced. R. J. Stough is interested in the new concern.

**Roanoke Rapids, N. C.**—The mill at this place is still standing idle as a result of the flood of several weeks ago, at which time part of the plant of the Roanoke Mill was washed away. The damaged portion is being repaired as rapidly as possible and operations will be resumed as soon as this work is completed.

**Norfolk, Va.**—The Norfolk Silk Mills at Lambert's Point which have been closed for some time will resume operations on Monday with former Manager E. Goldsmith in charge.

**Evansville, Ind.**—Announcement has been made that the Evansville Woolen Mills, recently closed because of bankruptcy proceedings, as noted, will start up soon, and employment will be given more than 100 operatives.

**Oxford, N. C.**—H. W. Shaw is contemplating the erection of a plant for the manufacture of carpets for buggy bottoms. He has hydro-electric power and wants information from experienced men on the cost of machinery and equipment.

**Greenville, S. C.**—For the first time lights were turned on at the new Dunnean Mill village last week. The mill will be ready for operation shortly. It will make lawns, linens and the finer grade of goods. Capt. J. Adger Smyth is president.

**Lumberton, N. C.**—The new machinery recently contracted for by the Jennings Mill, as noted, is beginning to arrive and is being installed. As was previously mentioned, this new equipment includes 2,000 spindles and accompanying cards, etc.

**Lumberton, N. C.**—Dividends of 5 and 2 per cent, respectively, were declared at quarterly meetings of the directors of the Lumberton and Dresden Cotton mills held recently. The quarterly meeting of the Jennings Cotton Mills was also held last week.

**St. Louis, Mo.**—Articles of incorporation have been issued to the Good Stocking Company of this city. The new concern will have a capital stock of \$25,000 and will engage in the manufacture of hosiery. Those applying for the charter were: C. C. Connor, P. L. Turley and John S. Maichester.

**Rock Hill, S. C.**—The Manchester Mills have placed a repeat order with John W. Fries, of Winston-Salem, N. C., through his representative, John E. Schott, of Charlotte, for 12 additional Hygrosso heads. This company has had 14 heads of the Hygrosso in operation for 14 months.

**Catechee, S. C.**—An enlargement is now being made to the power dam of the Norris Cotton Mills Company, and equipment for the development of hydro-electric power will be installed. The mill will then operate on the electric drive. At present this company operates an equipment of 18,228 ring spindles and 452 braid looms, both steam and electric power being used.

**Anderson, S. C.**—Two of the houses at the Anderson Cotton Mills were destroyed by fire last week. Both buildings were practically consumed though part of the household effects were saved in both cases.

**Dublin, Ga.**—The Georgia Cotton Mills here have been purchased by the Eastman Cotton Mills, of Eastman. The consideration is reported to have been in the neighborhood of \$100,000. It is understood that the Eastman Cotton Mills will put the local plant in operation as soon as practicable.

**Stonewall, Miss.**—The Stonewall Cotton Mills have decided to produce a finished fabric and are now erecting extensive dyeing and finishing plants. The company formerly produced a coarse grade on cloth and in the future this will be dyed and finished at their own plants.

**Easley, S. C.**—The addition to the Glenwood Cotton Mills is now well under way. All of the excavating has been finished and a large part of the concrete work is also complete. As soon as the weather permits contractors will begin laying the brick. It has been stated by the officials of the company that they will be ready to spin the coming crop of cotton.

**Columbus, Ga.**—The manufacturing plants using electricity to operate their machinery were compelled to close down for a while this week as the Columbus Power Company closed down part of its plant during the heavy electrical storm. Only about one hour's time was lost. The river at the Dillingham street bridge stood at 26 feet at 2:30 o'clock in the afternoon.

**Salisbury, N. C.**—The Princeton, formerly the Grace, the new mill to be operated by M. L. Jackson, T. B. Marsh and Gilbert Hambley, will soon begin the manufacture of all grades of table damask, and when in full swing will give employment to quite a number of skilled workmen. Frank L. Robbins, who formerly operated and managed this plant, before it shut down, is at work with a force of hands getting the machinery and plant in shape to begin active operation.

**Trion, Ga.**—An order for the sale of the factory and property of the Trion Mfg. Company has been made in accordance with the terms agreed upon at the recent meeting of the creditors and signed by Referee W. S. Rowell.

After a search of the bankruptcy law, no provision was found allowing a sale on credit, or partly on credit, therefore the terms of the sale will be cash. This is the only change from the plan previously agreed upon.

**Charlotte, N. C.**—The work of excavating for the addition to the spinning room of the No. 1 Highland Park Mill has already begun. The new building, which is to join the old one, is to be 136 feet long by 125 feet wide, and will also extend back to connect with the weaving room. Eight thousand spindles are to be added in addition to the 7,000 which are now in operation at this mill. The additional 8,000 spindles are being put in order to supply the demands of the looms operated at the No. 1 mill.

**Chattanooga, Tenn.**—The Southern Aseptic Cotton Company, recently organized at this city, has begun the manufacture of absorbent cotton and cotton gauze. The new concern started with a small equipment, but having received highest praise from many physicians at the State medical convention in session here last week, have ordered machinery for a permanent plant, which will be completed at an early date. R. T. Cameron is president of the company and the sales department is in charge of E. E. Jenkins. Other officers are J. D. Cunningham and G. L. Dover.

**Rhodhiss, N. C.**—Contracts for the erection of the Smith Manufacturing Company have been awarded to the Fiske Carter Construction Company, of Worcester, Mass., the contract having been secured through their Southern office at Greenville, S. C. The plans for this new mill were drawn up by the Shand Engineering Co., of Columbia, S. C.

The contract price was not given out. It has been generally understood that the cost of the mill will be in the neighborhood of \$500,000. According to the terms of the agreement the work is to be completed within six months.

**Spartanburg, S. C.**—C. Newman intends to go into the overall manufacturing business here. Several propositions have been made to him, but he expects to establish his factory at Spartanburg Junction. This will be a convenient location on account of the railroad facilities.

**Darlington, S. C.**—All of the old style looms at the Darlington Mfg. Co. will be replaced by automatic looms. The Draper Company, of Hopedale, Mass., has received the contract for the new looms. The contract calls for two hundred 40-inch looms. Two hundred 36-inch looms, now in operation, will be removed to allow space for the new looms. The latter will be equipped for the production of fancy fabrics. J. E. Sirrine, of Greenville, S. C., is the engineer-architect in charge of the improvements and additions to the plant. At present the Darlington company operates an equipment of 52,000 ring spindles and accompanying machinery.



**Jackson, Miss.**—It is reported here that S. N. Thomas is planning the erection of a plant in this city for the manufacture of underwear. It is expected that operations will be started in the near future and that employment will be given to from 35 to 40 operatives. It is stated that additions and improvements to enlarge the capacity of the plant will be made next fall. The product will be marketed through a number of stores in which Mr. Thomas is interested, as well as other retail establishments.

**Danville, Va.**—No further details have been announced concerning the improvements and additions to be made at the Dan River and Riverside Cotton Mills. As stated last week, the directors of the company have authorized the president, R. A. Schoolfield, to secure plans and invest \$1,500,000 for new buildings and additional machinery for the manufacture of cotton goods. It is reported that the addition will include 70,000 spindles, which when installed, will give the company a total of 300,000 spindles. An addition of 2,000 looms will also be made to the 7,383 now in operation.

#### Mill Store Damaged By Fire.

The store at the Massachusetts Mills, Lindale, Ga., caught fire at an early hour one morning last week but was almost extinguished by the automatic fire extinguishers before it was discovered. The damage to the fixtures and stock is about \$2,000 which is fully covered by insurance.

The store building, which is owned by the mill company is, like the rest of the mill buildings, equipped with automatic fire extinguishers which worked promptly and probably averted the loss of the building.

#### Cotton Mill Sold.

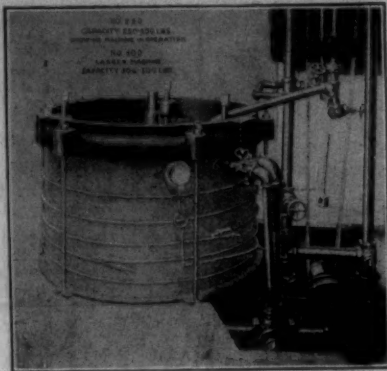
**Yorkville, S. C.**—The Tavora Cotton Mill at this place was sold at auction last week at the upset price of \$25,000. There was only one bid that of the bond holders. The mill is said to be in fine physical condition and will be operated under the management of Walter B. Moore who also operates the Neely Mfg. Co. and the Lockmore Mill, both located within the incorporate limits of the town. A new charter has been granted and the new corporation will be known as the Tavora Mill the letter "e" being substituted for "a" in the old name.

The mill will have a capital stock of \$40,000. The petitioners are: W. B. Moore, S. M. McNeel, M. W. White, J. B. Pegram and J. M. Starr.

## Economical Cotton Dyeing and Bleaching

In the Psarski Dyeing Machine

Saves Labor  
Saves Dyes  
Saves Drugs  
Saves Steam  
Saves Water



Saves  
Fibre



**Sulphur—Developed—Vat Dyes**  
Done Equally Well

**RAW STOCK DYEING**—The cotton goes to cards in as good condition as directly from bales. Is not rolled into balls and strings.

**BLEACHING**—Bleached and washed PERFECTLY CLEAN—FREE FROM CHLORIN OR ACID. 3½ hours to batch. Is not pounded and twisted into practically waste.

**SKEIN DYEING**—No Boiling Out—No Tangles—Yarns are left smooth and in perfect condition for winding, knitting, etc.

**HOSIERY**—Recommended size of machine does 300 pounds to batch, SULPHUR OR DEVELOPED BLACKS. It is not Roughed—No Singeing required—No Sorting—No Damaged.

15 to 20 per cent Saving in Drugs

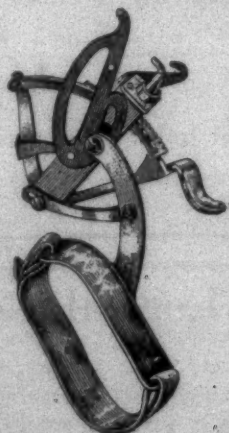
**The Psarski Dyeing Machine Co.**  
3167 Fulton Road CLEVELAND, OHIO

WILLIAM INMAN, Agent  
264 Newport Avenue  
Milwaukee, Wis.

R. D. BOOTH, Agent  
118 Ocean Avenue  
Atlantic City, N. J.

## The Byrd Knotter

Price \$20.00



Simple of Operation  
Durability Guaranteed  
Small Repair Cost

**Byrd Manufacturing Co.**  
DURHAM, N. C.

#### Drowned in Mill Pond.

John Waldrop, the young son of Mr. and Mrs. D. W. Walrop, was drowned in the pond at the Beaumont Mill, Spartanburg, S. C., last week. He, in company with his 9-year-old brother, was playing near the edge of the pond and while in the act of throwing a board into the water, slipped and fell in. His brother ran for help, but the child was drowned before assistance arrived. The body was recovered about 50 minutes later.

#### Power Companies Use Mutual Basis of Power Supply.

Negotiations have been closed between the Southern Power Company and the Yadkin River Power Company, whereby they have agreed upon a mutual basis of power supply, their lines connecting between Raleigh and Durham, N. C. The first test was made a few days ago, when power from Great Falls was transmitted 330 miles over the wires of the companies. The contract is for two years.

#### The Victories of Chemistry in the Textile Industries.

Many of the most brilliant achievements of chemistry have been directly concerned with the textile industries. A little touch of chemistry to cotton yarns and fabrics in the mercerizing process gave the world what is practically a new textile fibre—cotton with the beauty and lustre of silk. A history of absorbing interest replete with struggle, the capture of positions of temporary advantage, the constant shifting of the fighting line, crushing defeats and signal victories, might be written of the development of the bleach and alkali industry, upon the products of which the textile manufacturer depends for the finishing of his goods. We see the pathetic figure of La Blanc dying in the poorhouse after enriching the world which Napoleon was devastating. No less interesting in its human and scientific aspects is the long story of the coal-tar colors in which chemists take so large a measure of justifiable pride. An investment of \$750,000,000 follows Perkin's discovery of mauve.

#### How It Was to be Done.

A colored blacksmith recently announced a change in his business as follow: "Notice—De co-pardnership heretofore resisting between me and Mose Skinner is hereby resolved. Dem what owe de firm settle wid me, and dem what de firm owes will settle wid Mose."—Ex.

## AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. & Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING  
COMINS SECTIONAL HUMIDIFIER

JOHN HILL, Southern Representative, Third Nat. Bank Building, ATLANTA, GEORGIA



## Cotton Goods Report

New York.—A further advance is expected in the staple goods division of the market. The demand is very steady on lines of sheetings, drills, denims, tickings, etc., and goods available for the deliveries wanted, decidedly scarce. In most cases the mills are so well sold ahead on many of the above lines that they are refusing to accept further business at current price levels. On gingham and prints business put through has been of large volume with well known brands of gingham held "at value," while there is a steady demand for tickets that are no so well known. Advances are expected at any time on standard brands, and some buyers express surprise that these have not already been announced. The situation on prints is very strong, and with gray goods at current levels advances are expected at no very distant date. On 4-4 bleached goods many of the mills are now sold ahead about as far as they care to go, and requests for still later deliveries at current price levels are being refused. Additional orders are being received on napped goods and flannelettes, in spite of the recent sharp advances named on these lines, with deliveries running well through into the fall. Jobbers complain that the retail demand has fallen off considerably during the past few days, as the weather has been too cold for retailers to do much business on spring and summer lines. In the carpet and rug trade interest now centers in the fall opening, which is less than three weeks away. It is now now a question of whether or not advances will be named on fall lines, but how much of an advance will manufacturers ask. Buyers who counted on an auction sale just before the opening, will be forced to cover their needs from the regular fall lines, although there are still quite a few of the opinion that stocks in manufacturers' hands are considerably larger than they are willing to admit.

Trading continued fair in the Fall River print cloth market last week. The demand was principally for wide goods and prices on this line advanced an eighth of a cent over last week's quotations. There was very little call for narrow goods although this style held very steady. In spite of the fact that the prices have been advanced on wide goods this style still holds lower than narrow goods. There was no other change in price on cotton goods in this market.

Sales for the week are estimated at 165,000 pieces, of which about 50,000 were spots. Deliveries on most of the goods sold are to be made in June, although sales are fair for delivery for July and August. There were a few contracts placed for delivery at later dates. Buyers generally are in the market for goods for early summer delivery and the uncertainty of the cotton situation, with a tendency for livery as far along as September advancing prices, is causing manufacturers to insist upon the top prices all around.

Current prices on cotton goods were quoted in New York as follows:

Pt clths, 28-in, std.	3 7-8	—
28-in., 64x60s	3 3-4	—
Gray goods, 39-in., 68		
x72	5 5-8	to 5 3-4
38 1-2-in stds	5 1-8	to 5 3-16
4-yd, 80x80	6 7-8	to 7
Brown drills, std	8	—
Shirts, south, std.	7 3-4	—
3-yard	7	—
4-yd, 56x60	6 1-4	—
Denims, 9-oz.	13	to 16 1-2
Stark, 8-oz. duck	12 1-4	—
Hartford, 11-oz., 40-in.		
duck	14 1-2	—
Std fancy prints	5 1-4	—
Standard gingham	6 1-4	—
Fine dress ging.	7	to 9 1-4
Kid fin. cambries	4 1-4	to 4 1-2

### Weekly Visible Supply of American Cotton.

April 19, 1912	4,075,799
Previous week	4,228,965
Last year	1,176,000

### Weekly Cotton Statistics.

New York, April 19.—The following statistics on the movement of cotton for the week ending Friday, April 19, were compiled by the New York cotton exchange:

#### WEEKLY MOVEMENT.

	This yr.	Last Yr
Port receipts	111,855	52,024
Overland to mills and Canada	18,692	9,977
Southern mill takings (est.)	35,000	35,000
Loss of stock at interior towns	27,768	27,976

Brought into sight for the week	138,780	69,025
TOTAL CROP MOVEMENT.		
This Yr. Last Yr.		

Overland to mills		
Port receipts	11,221,868	8,138,830
and Canada	866,279	872,980
South. mill takings		
Southern mill takings (est.)	2,280,000	1,900,000
Stock at interior towns in excess of Sept. 1	220,964	311,794

Brought into sight thus far for season	14,589,111	11,223,604
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### She Classified Herself.

A woman with little wit sat at a public meeting between a bishop and a rabbi.

She thought she would be clever and said to the rabbi: "I feel as if I were a leaf between the Old and the New Testaments."

"Yes, Madam," said the rabbi, "that page is usually a blank one." —Exchange.

## GRINNELL WILLIS & COMPANY

44-46 Leonard Street, New York

### SELLING AGENTS

BROWN AND BLEACHED COTTON GOODS FOR HOME EXPORT MARKETS



Independence is our motto, and we have no connection with any other Ring Traveler Company.

U. S. RING TRAVELER CO.

AMOS M. BOWEN, Treas.

PROVIDENCE, R. I.

## Southern Audit Co.

(INCORPORATED)

### Public Accountants and Auditors

901-903 Realty Building  
Phone 2103

CHARLOTTE, N. C.

C. L. SMITH  
President

JOHN W. TODD  
Vice-President and Secretary

## The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

### J. A. PRIDE

General Industrial Agent, Seaboard Air Line Railway

NORFOLK, VIRGINIA.

## The Logical Location for Textile Mills

The three absolutely necessary commodities for operating successfully a textile mill are POWER, RAW MATERIAL and LABOR.

If your mill is located in a Southeastern State on one of the many CHEAP WATER POWERS which abound in that locality—where cotton is delivered at your factory doors by growers—where intelligent LABOR IS PLENTIFUL and living expenses low, you will realize larger dividends than would be possible with your factory located in any other part of the country.

If you contemplate establishing an industry, we would be pleased to give further and full information regarding location along the Southern Railway System.

### M. V. RICHARDS

Land and Industrial Agent Southern Railway

Room J

WASHINGTON, D. C.



# The Yarn Market

Philadelphia, Pa.—The aggregate volume of business in the yarn market was not as large as that transacted during the previous week, though there were some sales of 25,000 to 50,000 pounds. In most cases the buying was for small quantities for quick or spot deliveries. Some knitters and a few weavers bought for later delivery.

The knit goods situation is said to be good with the exception of single combed yarn and carded yarn for hosiery. Manufacturers of lightweight underwear are said to be in a position strong enough to advance prices on duplicate orders.

There is a fair demand for two-ply combed yarn, both in the gray and mercerized. The demand of single combed yarns from 10s to 26s was not so large, as the supply is small and prices have been advanced.

Buying on the hand to mouth policy is still continued by many weavers, though there are a few on some lines who are buying for eight to ten weeks ahead, where they can buy at prices lower than spinners' quotations. There are a few who refuse to buy at any prices offered to them, but generally they are well covered for the next two months and some of them for an even longer time.

## Southern Single Warps:

8s	17 1-2
10s	18 —
12s	18 —18 1-2
14s	18 3-4-19
16s	19 —19 1-2
20s	19 1-2-20
24s	21 —21 1-2
26s	21 1-2-22
30s	25 —25 1-2
40s	30 —30 1-2

## Southern Two-Ply Warps:

8s	17 1-2-18
10s	18 —18 1-2
12s	18 1-2-19
14s	19 1-2
16s	20 —20 1-2
20s	21 3-4-22
24s	22 1-2-23
26s	23 —23 1-2
30s	25 3-4-26
36s	29 —29 1-2
40s	31 1-2-32
50s	38 1-2-39

## Southern Frame Spun Yarn on Cones

8s	17 1-2-18
10s	18 —18 1-2
12s	18 1-2-19
14s	19 —19 1-2
18s	20 —20 1-2
20s	21 —
21s	21 —
22s	1 1-2-22
24s	22 1-2
26s	23 —23 1-2
30s	24 —24 1-2
40s	29 1-2-30

## Single Skeins Carded Peeler:

20s	24 —
24s	25 —
26s	25 1-2
30s	26 1-2
40s	31 —32
50s	38 —

## Two-Ply Carded Peeler in Skeins:

20s	25 —
22s	25 1-2
24s	26 —
26s	26 1-2
30s	28 —28 1-2
30s-41's	34 —
36s	30 1-2-31
40s	32 1-2-33
50s	39 —40
60s	46 —47

## Single Combed Peeler Skeins:

20s	26 1-2-27
24s	27 1-2-28
30s	30 —31
40s	37 —38
50s	45 —46
60s	52 —53

## Two-Ply Combed Peeler Skeins:

20s	28 —28 1-2
24s	29 —29 1-2
30s	31 —32
40s	41 —42
50s	47 —49
60s	55 —58
70s	62 —65
80s	73 —77

## Carpet and Upholstery Yarn in Skeins:

8-3 hard twist	17 —
8-4 slack	18 —
9-4 slack	18 1-2

# A. M. Law & Co. F. C. Abbott & Co.

Spartanburg, S. C.

BROKERS

Dealers in Mill Stocks and other Southern Securities

Charlotte, N. C.

BROKERS

Southern Mill Stocks, Bank Stocks,

N. C. State Bonds, N. C. Rail-

road Stock and Other High Grade Securities

## South Carolina and Georgia Mill Stocks.

	Bid	Asked
Abbeville Cot Mills, S. C.	75	
Aiken Mfg. Co. S. C.	72½	
Amer. Spin. Co., S. C.	162	
Anderson Cot Mill, S. C. p	90	
Aragon Mills, S. C.	65	
Areadia Mills, S. C.	90	
Arkwright Mills, S. C.	100	
Augusta Factory, Ga.	45	

Belton Cotton Mills, S. C.	100	110
Brandon Mills, S. C.	93	
Brogan Mills, S. C.	61	
Calhoun Mills, S. C.	51	61
Capital Cot Mills, S. C.	85	
Chiquola Mills, S. C.	167	
Clifton Mfg. Co., S. C.	75	
Clifton Mfg. Co., S. C. pfd	100	
Clinton Cot Mills, S. C.	125	
Courtenay Mfg. Co., S. C.	90	
Clumbus Mfg. Co., Ga.	92½	100
Cox Mfg. Co., S. C.	70	
D. E. Converse Co., S. C.	75	
Dallas Mfg. Co., Ala.	100	
Darlington Mfg. Co., S. C.	75	
Drayton Mills, S. C.	90	
Eagle & Phenix Mills, Ga.	108	
Easley Cot Mills, S. C.	160	165
Enoree Mfg. Co., S. C.	25	
Enoree Mfg. Co., S. C. pfd	100	
Enterprise Mfg. Co., Ga.	70	
Exposition Cot Mills, Ga.	210	
Fairfield Cot Mills, S. S.	70	
Gaffney Mfg. Co., S. C.	60	
Gainesville Cot Mills, Ga., common	62½	

Glenwood Mills, S. C.	141	
Glenn-Lowry Mfg. Co., S. C.	101	
Glenn-Lowry Mfg. Co., S. C. pfd.	95	

Gluck Mills, S. C.	91	
Granby Cot. Mills, S. C.		
Granby C Mills, S. C. pfd	135	145
Granite C Mills, S. C.	57	60
Greenwood C Mills, S. C.	57	60
Grendel Mills, S. C.	91	100
Hamrick Mills, S. C.	102	
Hartsville C Hills, S. C.	170	
Inman Mills, S. C.	105	
Inman Mills, S. C. pfd.	100	
Jackson Mills, S. C.	95	
King, John P. Mfg. Co., Ga	80	85
Lancaster Cot Mills, S. C.	130	
Lancaster C. M., S. C. pfd	98	
Langley Mfg. Co., S. C.	65	
Laurens Cot Mills, S. C.	126	
Limestone Cot Mills, S. C.	155	
Lockhart Mills, S. C.	70	
Marlboro Mills, S. C.	60	75
Mills Mfg. Co., S. C.	90	93
Molloyhon Mfg. Co., S. C.	105	
Monarch Cot Mills, S. C.	110	
Monaghan Mills, S. C.		
Newberry Cot Mills, S. C.	125	135
Ninety-Six Mills, S. C.	135	140
Norris Cot Mills, S. C.	115	
Olympia Mills, S. C. pfd		
Orangeburg Mfg. Co., S. C. pfd.	90	

Orr Cotton Mills, S. C.	91	
Ottaray Mills, S. C.	100	
Oconee, S. C., com.	100	
Oconee, S. C. pfd.	100 & int	
Pacolet Mfg. Co., S. C.	90	
Pacolet Mfg. Co., pfd.	100 & int	

## North Carolina Mill Stocks.

	Bid	Asked
Arlington		137
Atherton		
Avon		100
Bloomfield		110
Brookside		112
Brown Mfg. Co., com	100	115
Cabarrus	131	
Cannon	120	
Chadwick-Hoskins		95
Chadwick-Hoskins, pfd.		100
Clara		110
Cliffside		200
Cora		135
Dresden		136
Dilling		
Edird	100	125
Elmira, pfd.		100
Erwin Com		120
Erwin, pfd	101	102
Florence		126
Flint	140	
Gaston		90
Gibson		80
Gray Mfg. Co.		121
Highland Park	150	200
Highland Park, pfd		100
Henrietta		170
Imperial	101	106
Kesler	115	
Linden		
Loray, pfd		91
Lowell		181
Lumberton		251
Mooreville	123	
Modena		
Nokomis, N. C.		200
Ozark	92	110
Patterson	120	126
Raleigh	100	104
Roanoke Mills	140	161
Salisbury		136
Statesville Cot. Mills		
Trenton, N. C.		
Tuscarora		90
Washington, pfd.	95	100
Washington	20	30
Wiscasset	100	115
Woodlawn		100

Parker Mill, guaranteed		102
Parker Mill, preferred		65
Parker Mill, common		
Pelzer Mfg. Co., S. C.	138	140
Pickens Cot. Mill, S. C.	94	
Piedmont Mfg. Co., S. C.	144	160
Poe, F. W. Mfg. Co., S. C.	100	115
Richland Cot Mills, S. C. p		
Riverside Mills, S. C.		25
Sibley Mfg. Co., Ga.	60	64
Spartan Mills, S. C.	110	
Toxaway Mills, S. C.		72
Tucapau Mills, S. C.	260	
Union-Buffalo Mills, S. C., 1st preferred	50	60
Union-Buffalo Mills, S. C., 2nd preferred		10
Victor Mfg. Co., S. C.		
Ware Shoals Mfg. Co., S. C.		80
Warren Mfg. Co., S. C.	80	
Warren Mfg. Co., S. C. p	100	
Watts Mills, S. C.		85
Whitney Mfg. Co., S. C.		115
Williamston Mills, S. C.		115
Woodruff Cot Mills, S. C.		100



## Personal Items

George Wilson is now fixing looms at Bamberg, S. C.

G. B. Young, of Fries, Va., has moved to Schoolfield, Va. Jno. H. Stevens is now overseer of carding at the Pelham (Ga.) Mfg. Co.

George Witherspoon has resigned as overseer of weaving at the Drayton (S. C.) Cotton Mills.

Pink Lackay, from York Cotton Mill, is now fixing looms at the Aragon Mill, Rock Hill, S. C.

J. K. Walker has resigned his position as overseer of weaving at Bamberg, S. C.

Ed. DeForrest of Warrenville, S. C., is now located at Philadelphia, Pa.

D. M. Tompkins has resigned as overseer of spinning at the Seneca Cotton Mills, Seneca, S. C.

J. C. Love of the Calvine Mill, Charlotte, N. C., is now overseer of spinning at the Fidelity Mill, of the same place.

W. B. Hixon, who resigned as overseer of spinning at Avondale Mills, Birmingham, Ala., is now located at Bath, S. C.

C. J. Smith has been promoted from section hand to second hand in spinning at the Buffalo (S. C.) Mills.

J. S. Lamb, of Birmingham, Ala., has accepted the position of overseer of weaving at the Union Cotton Mills, Lafayette, Ga.

J. C. Stroud, who recently resigned as overseer of spinning at the Glencoe Mills, Columbia, S. C., has accepted a similar position with the Seneca (S. C.) Cotton Mills.

G. L. Austin has resigned his position in the Brandon Mill, Greenville, S. C., to accept a position as second hand in spinning at the Westervelt Mill of the same place.

Harvell Rogers, of Glass, who has been with the Stuart Cramer Co., of Charlotte, for some time, has charge of the company's exhibit at the textile show at Boston.

A. H. Webb has resigned his position as section hand in spinning room at Columbus (Ga.) Mfg. Co. to accept position as second hand with the Yazoo Yarn Mill, Yazoo City, Miss.

W. A. McKee has resigned as chief engineer and master mechanic at the Wallace Mills, Jonesville, S. C., and accepted a position with the American Machine and Mfg. Co., Greenville, S. C.

R. L. Bryant, overseer of the dressing at the Washington Mills, Fries, Va., is at present engaged for two or three months with the Stark Mill, Manchester, N. H., introducing new methods and system in their slashing and warping department. He will return to Fries about May first.

### Married Under Difficulties.

After being refused a marriage license, on the ground that the young lady was too young, and did not have her parent's consent, John Walker and Miss Lizzie Quinn, both of the Loray Mill, Gastonia, N. C., returned to the register of deeds with an order signed supposedly by the parents of the girl, and John Willis, a witness. Later it developed that the order was forged and that the girl signed her parents' names to it. Lester Walker, a brother of the groom, it is said, wrote the other.

Mr. Quinn, father of the bride, is very much wrought up over the matter and says he does not like the young man who has married his daughter under such precarious circumstances.

### Mill Worker Shot Hackman.

While he was being severely beaten by the victim and after he had been challenged to use his pistol according to the evidence given at the coroner's inquest, Levi Lawson, a mill worker of Pacolet, S. C., shot Howard Kirby, a hackman of that place Saturday night. Kirby died in the Spartanburg hospital. Lawson surrendered and is in jail. The affair occurred near O. C. Grossett's store on the road leading from the town of Pacolet Mills.

### Annexed Neighbor's Cow.

C. O. Boswell, who moved to Orr Cotton Mill a month or so ago from near Elberton, Ga., but who now resides at Cox Mills, Anderson, S. C., decided Friday night to go into the

live stock business. His plans, however, were broken up somewhat as he obtained his stock in a manner not exactly agreeable to all parties concerned—S. A. Pickens and J. B. Bryant, both residents of Orrville and likewise each of them the possessor of a fine milch cow, found when they went out to the cow barn Saturday morning their cows were gone. A diligent search was at once instituted and they soon became convinced that the cows had been driven off the place. Officers were notified of the facts, and were soon on the trail, finding the aforementioned Boswell and the cows at Iva, where he had sold them for \$16 each, the party buying them suspecting something wrong and holding up the deal until he found out. Boswell was brought in Saturday afternoon and is now in jail.

### Homicide at Belton.

Sam Fisher shot and instantly killed Mart Strickland. Both men worked in the Belton (S. C.) Mills and were each 20 years of age. The shooting occurred Tuesday.

Fisher was immediately brought to the county jail after shooting, and when seen in his cell, said that he and Strickland had been drinking together during the afternoon. For some reason unknown to Fisher, he says, Strickland got mad at him and advanced on him. Fisher said he wanted to avoid a row, so ran; that Strickland picked up a clinker and hurled it at him, knocking him down, and Strickland continued to advance on him, at the same time trying to open his knife. Fisher says he pulled his gun while lying on the ground and fired five times at Strickland. The first and second shots missed their mark, but the third struck Strickland, who expired in a few minutes. Fisher's account of the shooting was corroborated by witnesses.

A later report states that Fisher was released on a bond of \$1,000.

### Prattville Cotton Mill,

#### Prattville, Ala.

D. E. Edwards.....Superintendent  
J. W. McBryde.....Carder  
Neal McBryde.....Spinner  
A. M. Bates.....Cloth Room  
A. E. McCreary.....Master Mechanic

### His Way.

"Well, Mum," said the sympathetic neighbor the day after the funeral. "I suppose your Bill's hitting the harp with the angels now?"

"Not him, sir," said the widow. "Hitting the angels with the harp is nearer his mark."—Exchange.

### No Prodigy.

"Yes, sir, that boy of mine is a piano player. Why he can play with his toes," said a proud father.

"How old is he?" asked the friend. "Fifteen."

"Well," said the friend, "I've got a boy at home who can play with his toes, and he's only one year old."—Exchange.

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## ARABOL MANUFACTURING CO.

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CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.



# Want Department

## Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell, the want columns of the **Southern Textile Bulletin** afford a good medium for advertising the fact.

Advertisements placed with us reach all the mills.

## Employment Bureau.

The Employment Bureau is a feature of the **Southern Textile Bulletin** and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau.

## Spinner Wanted.

Want overseer of spinning (7,000 spindles) on 12's to 24's hosiery yarns. Must be sober, of good character and produce results. Married man preferred. Also want section man in winding department. State wages expected and full particulars. Address No. 1,014.

## Cloth Room Overseer.

An A-1 overseer of cloth room in a 50,000 spindle mill, making ducks, drill's, twills, sheetings and osnab' rgs. Nothing but a man of wide experience in managing large rooms on this class of work need apply.

This position pays about \$1,000 a year, and free house rent. Address No. 1013.

## Operatives Wanted.

We will need card and picker room help for night work beginning about May 11th. Can furnish day work for spinners, spoolers and winders in the families of men who take the night work.

Twine Mill Co.,  
T. J. McNeely, Supt.,  
Roanoke, Va.

## Read This:

We are starting up our weaving, and can use a number of first class DRAWING-IN HANDS at GOOD WAGES. Can also use several more families of good SPINNERS. Apply to

R. P. Sweetly, Supt.,  
Wylie Mills, Chester, S. C.

## Carder Wanted.

An A-1 overseer of carding for a 60,000 spindle mill, manufacturing cloth, rope, and twine, and making yarns from 1's to 24's. We do not want anyone to apply for this position except an A-1 carder, who thoroughly understands the theory of carding, and has had some years practical experience running large rooms on this class of work, and who can turn out good clean, and smooth even yarns, free of leaf and dirt of all descriptions.

This mill is located in the South. This is a good position for the right man, and pays, including free house rent, about \$1,400 per year. Address No. 1012.

## Wanted.

Good, steady man to look after and repair Reed and Harness. Steady work with good pay to right man. Apply to

C. C. Bolen,  
Dan River Mills, Danville, Va.

WANT position as overseer of carding. 17 years in card room. 7 years experience as overseer. Can furnish good references. Address No. 123.

WANT position as superintendent, or overseer of large weave room. Have had long practical experience and can furnish satisfactory reference. Address No. 126.

WANT position as engineer and machinist. Now employed but could change on short notice. Can furnish good references. Address No. 127.

WANT position as overseer of carding; or carding and spinning in small mill. Age 34. Married. Long experience. Can furnish good references. Address No. 128.

WANT position as superintendent of yarn mill. Have had six years' experience hosiery yarns. Can furnish good references. Age 30. Married. Address No. 129.

WANT position as overseer of carding or spinning or overseer of carding and spinning. Have had long experience and can furnish the best of references. Address No. 130.

WANT position as overseer of weaving in small room, or second hand in large room. Experienced on counts from 18s to 50s. Experienced on plain and Draper looms. Good manager of help, sober and reliable. Good references. Address No. 131.

WANT position as overseer weaving in large mill on white work. 22 years' experience on Stafford Automatic Looms, also expert on Draper Looms. Can get quality and quantity. Will consider nothing less than \$5 per day. Address No. 132.

WANT position as superintendent of mill making cloth, or would take overseer of spinning in large erences. Now employed as sup-mill. Long experience, good referentent but wish to change. Address No. 133.

WANT position as carder or spinner. Can take position in short notice and can furnish the best of references. Address No. 134.

WANT position as superintendent of small yarn mill, or overseer of carding in large mill. Familiar with white and colored goods. 23 years experience in mill business. Now employed as superintendent. Would not consider less than \$3.50 per day. Address No. 135.

WANT position as superintendent of yarn mill. Experienced on white and colored yarns from 8's to 40's. Have 23 years experience and can give good references. Address No. 135.

WANT position as overseer of weaving. Experienced on both colored and white work. Age 34. Married. Good references. Address No. 136.

WANT position as overseer of carding at not less than \$3.00. Now employed but wish healthier location. Have had long experience and can furnish best of references. Address No. 137.

WANT position as superintendent or overseer of carding and spinning at not less than \$4.00. Now employed in large mill but wish to change. Good references. Address No. 138.

WANT position as carder and spinner or spinner in large mill. Age 34. Married. Good experience and references. Address No. 139.

WANT position as superintendent. Long experience and now employed but wish larger mill. Can furnish best of references. Address No. 140.

WANT position as superintendent or carder and spinner. Now employed and can furnish good references. Address No. 141.

WANTED position as overseer spinning by practical as well as a technical man. Married. Am strictly temperate. Can come on short notice. Will consider nothing less than \$2.50 per day. Address No. 142.

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WANT position as overseer of spinning. Experience on all numbers but prefer fine work. Am from the South but for several years have been with fine yarn mills at New Bedford and other New England towns. Good references. Address No. 143.

WANT position as overseer of cloth room. 20 years experience. 10 years at present place. Strictly sober. Good references. Address No. 144.

WANT position as superintendent or overseer of large card room. Have had long experience and am now employed. Address No. 145.

WANT position as superintendent. 27 years mill experience. 8 years on present position. Experienced on both white and colored goods. Satisfactory references. Address No. 146.

WANT position as overseer of weaving. Experience on both plain and fancy goods but would prefer box loom job. Have filled former positions satisfactorily and can get production at low cost. Address No. 147.

WANT position as superintendent in North Carolina, South Carolina or Northern Georgia. Long experience and can furnish best of references as to ability and character. Address No. 148.

WANT position as overseer of weaving. Married. Age 40. Have run some of the largest rooms in S. C. and Ga. Can give good references. Address No. 152.

WANT position as superintendent. Have had long practical experience and am now assistant superintendent of a large mill and giving satisfaction. Can give as reference my present employers. Address No. 149.

WANT position as superintendent or carder in a large mill. 15 years experience as carder. 4 years as superintendent. Experienced on both plain and fancies. Best of references. Address No. 150.

WANT position as overseer of weaving in a good mill. Have had eleven years experience on plain and check work. Address No. 151.

(Continued on Page 18)



WANT position as overseer of weaving. Have held present position as overseer for four years. Have had good experience on Draper, Crompton Knowles and dobby looms. Good references. Will not consider less than \$3.50. Address No. 153.

WANT position as overseer of weaving. 15 years' experience on both white and colored goods. Can furnish references from first class mills. Address No. 154.

WANT position as superintendent of either yarn or weaving mill of 5,000 to 15,000 spindles. At present employed in fine colored goods mill. Age 32. Married. 20 years' experience. Good references. Address No. 155.

WANT position as overseer of carding or spinning. Have had long practical experience and am now holding position in first-class mill but prefer to change. Address No. 156.

WANT position as superintendent. 36 years of age. Strictly sober. Best of references. Would consider large carding or spinning job. Held present position six years. Address No. 157.

WANT position as overseer of spinning. 10 years' experience as overseer on No. 30's to 100's. Can give good references. Married. 30 years old. Address No. 158.

WANT position as superintendent. Have had long experience on coarse work and blanket manufacturing. First class references. Address No. 159.

WANT position as overseer of carding. Long experience and have always given satisfaction. Now employed but prefer to change. Good references. Address No. 160.

WANT position as overseer of slashing, beaming (long or short chain), spooling, warping or drawing-in. Have had long experience and am expert on sizing. Address No. 161.

WANT position as superintendent. Now employed but prefer to change. Can furnish first class references both as to character and ability. Address No. 162.

WANT position as overseer spinning. 20 years experience, both colored and plain work. Age 41. Married. Can furnish best of references. Address No. 163.

WANT position as superintendent of small mill, not over 8,000 spindle son hosiery yarn, or overseer of large card room. Good references. Address No. 164.

WANT position as overseer of spinning, twisting, or in winding room. 18 years experience in spinning and twisting. Familiar with spooling, reeling and winding. Will not consider less than \$2.00 per day. Age 32. Married. Address No. 165.

WANT position as overseer of carding. Have had 21 years experience as overseer of carding in some of the best mills in the South. Can furnish the best of references. Address No. 167.

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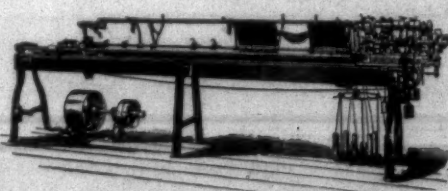
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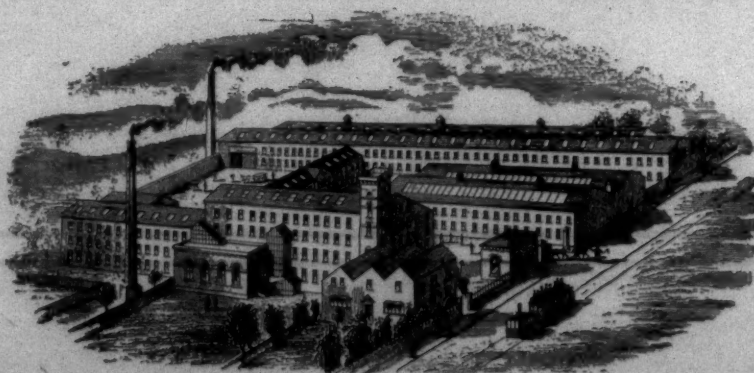
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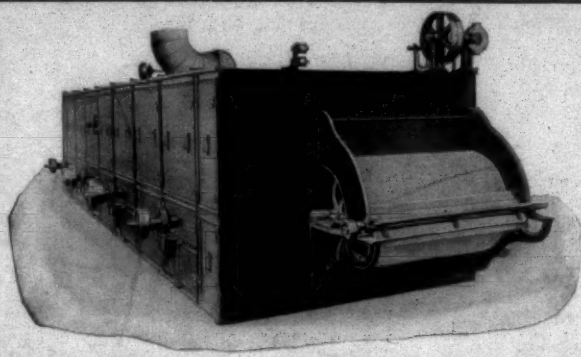
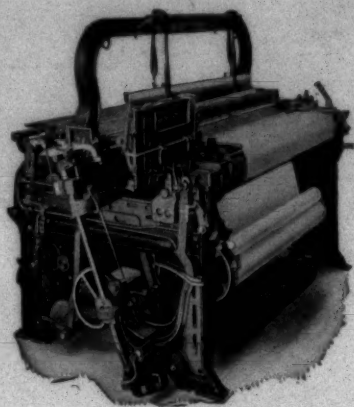
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